



PCT

RAW SEQUENCE LISTING

DATE: 03/09/2005

PATENT APPLICATION: US/10/526,060

TIME: 15:14:39

Input Set : A:\seqlist.txt

Output Set: N:\CRF4\03092005\J526060.raw

4 <110> APPLICANT: ASHMAN, Claire
 5 ELLIS, Jonathan Henry
 7 <120> TITLE OF INVENTION: IMMUNOGENIC COMPOSITION COMPRISING AN
 8 IL-13 ELEMENT AND T CELL EPITOPES, AND ITS THERAPEUTIC USE
 11 <130> FILE REFERENCE: PG4938
 C--> 13 <140> CURRENT APPLICATION NUMBER: US/10/526,060
 C--> 14 <141> CURRENT FILING DATE: 2005-02-28
 16 <150> PRIOR APPLICATION NUMBER: PCT/GB03/03703
 17 <151> PRIOR FILING DATE: 2003-08-28
 19 <150> PRIOR APPLICATION NUMBER: GB 0304672.9
 20 <151> PRIOR FILING DATE: 2003-02-28
 22 <150> PRIOR APPLICATION NUMBER: GB 0220212.5
 23 <151> PRIOR FILING DATE: 2002-08-30
 25 <160> NUMBER OF SEQ ID NOS: 68
 27 <170> SOFTWARE: FastSEQ for Windows Version 4.0
 29 <210> SEQ ID NO: 1
 30 <211> LENGTH: 112
 31 <212> TYPE: PRT
 32 <213> ORGANISM: Homo sapien IL-13
 34 <400> SEQUENCE: 1
 35 Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu Glu Leu
 36 1 5 10 15
 37 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
 38 20 25 30
 39 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu
 40 35 40 45
 41 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
 42 50 55 60
 43 Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
 44 65 70 75 80
 45 Ser Leu His Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
 46 85 90 95
 47 Asp Leu Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Arg Phe Asn
 48 100 105 110
 51 <210> SEQ ID NO: 2
 52 <211> LENGTH: 111
 53 <212> TYPE: PRT
 54 <213> ORGANISM: Murine IL-13
 56 <400> SEQUENCE: 2
 57 Gly Pro Val Pro Arg Ser Val Ser Leu Pro Leu Thr Leu Lys Glu Leu
 58 1 5 10 15
 59 Ile Glu Glu Leu Ser Asn Ile Thr Gln Asp Gln Thr Pro Leu Cys Asn
 60 20 25 30

Does Not Comply
Corrected Diskette Needed

p.3

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61 Gly Ser Met Val Trp Ser Val Asp Leu Ala Ala Gly Gly Phe Cys Val
62          35          40          45
63 Ala Leu Asp Ser Leu Thr Asn Ile Ser Asn Cys Asn Ala Ile Tyr Arg
64          50          55          60
65 Thr Gln Arg Ile Leu His Gly Leu Cys Asn Arg Lys Ala Pro Thr Thr
66 65          70          75          80
67 Val Ser Ser Leu Pro Asp Thr Lys Ile Glu Val Ala His Phe Ile Thr
68          85          90          95
69 Lys Leu Leu Ser Tyr Thr Lys Gln Leu Phe Arg His Gly Pro Phe
70          100          105          110

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73 <210> SEQ ID NO: 3

74 <211> LENGTH: 111

75 <212> TYPE: PRT

76 <213> ORGANISM: Porcine IL-13

78 <400> SEQUENCE: 3

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79 Gly Pro Val Pro Pro His Ser Thr Ala Leu Lys Glu Leu Ile Glu Glu
80 1          5          10          15
81 Leu Val Asn Ile Thr Gln Asn Gln Lys Thr Pro Leu Cys Asn Gly Ser
82          20          25          30
83 Met Val Trp Ser Val Asn Leu Thr Thr Ser Met Gln Tyr Cys Ala Ala
84          35          40          45
85 Leu Glu Ser Leu Ile Asn Ile Ser Asp Cys Ser Ala Ile Gln Lys Thr
86          50          55          60
87 Gln Arg Met Leu Ser Ala Leu Cys Ser His Lys Pro Pro Ser Glu Gln
88 65          70          75          80
89 Val Pro Gly Lys His Ile Arg Asp Thr Lys Ile Glu Val Ala Gln Phe
90          85          90          95
91 Val Lys Asp Leu Leu Lys His Leu Arg Met Ile Phe Arg His Gly
92          100          105          110

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95 <210> SEQ ID NO: 4

96 <211> LENGTH: 112

97 <212> TYPE: PRT

98 <213> ORGANISM: Bovine IL-13

100 <400> SEQUENCE: 4

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101 Ser Pro Val Pro Ser Ala Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
102 1          5          10          15
103 Val Asn Ile Thr Gln Asn Gln Lys Val Pro Leu Cys Asn Gly Ser Met
104          20          25          30
105 Val Trp Ser Leu Asn Leu Thr Ser Met Tyr Cys Ala Ala Leu Asp
106          35          40          45
107 Ser Leu Ile Ser Ile Ser Asn Cys Ser Val Ile Gln Arg Thr Lys Lys
108          50          55          60
109 Met Leu Asn Ala Leu Cys Pro His Lys Pro Ser Ala Lys Gln Val Ser
110 65          70          75          80
111 Ser Glu Tyr Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Leu Lys
112          85          90          95
113 Asp Leu Leu Arg His Ser Arg Ile Val Phe Arg Asn Glu Arg Phe Asn
114          100          105          110

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117 <210> SEQ ID NO: 5

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Input Set : A:\seqlist.txt

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118 <211> LENGTH: 111
 119 <212> TYPE: PRT
 120 <213> ORGANISM: Canine IL-13
 122 <400> SEQUENCE: 5
 123 Ser Pro Val Thr Pro Ser Pro Thr Leu Lys Glu Leu Ile Glu Glu Leu
 124 1 5 10 15
 125 Val Asn Ile Thr Gln Asn Gln Ala Ser Leu Cys Asn Gly Ser Met Val
 126 20 25 30
 127 Trp Ser Val Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu Ser
 128 35 40 45
 129 Leu Ile Asn Val Ser Asp Cys Ser Ala Ile Gln Arg Thr Gln Arg Met
 130 50 55 60
 131 Leu Lys Ala Leu Cys Ser Gln Lys Pro Ala Ala Gly Gln Ile Ser Ser
 132 65 70 75 80
 133 Glu Arg Ser Arg Asp Thr Lys Ile Glu Val Ile Gln Leu Val Lys Asn
 134 85 90 95
 135 Leu Leu Thr Tyr Val Arg Gly Val Tyr Arg His Gly Asn Phe Arg
 136 100 105 110

139 <210> SEQ ID NO: 6

140 <211> LENGTH: 111

141 <212> TYPE: PRT

142 <213> ORGANISM: Rat IL-13

143 <400> SEQUENCE: 6

144 Gly Pro Val Arg Ser Thr Ser Pro Pro Val Ala Leu Arg Glu Leu
 145 1 5 10 15
 146 Ile Glu Glu Leu Ser Asn Ile Thr Gln Asp Gln Lys Thr Ser Leu Cys
 147 20 25 30
 148 Asn Ser Ser Met Val Trp Ser Val Asp Leu Thr Ala Gly Gly Phe Cys
 149 35 40 45
 150 Ala Ala Leu Glu Ser Leu Thr Asn Ile Ser Ser Cys Asn Ala Ile His
 151 50 55 60
 152 Arg Thr Gln Arg Ile Leu Asn Gly Leu Cys Asn Gln Lys Ala Ser Asp
 153 65 70 75 80
 154 Val Ala Ser Ser Pro Pro Asp Thr Lys Ile Glu Val Ala Gln Phe Ile
 155 85 90 95
 156 Ser Lys Leu Leu Asn Tyr Ser Lys Gln Leu Phe Arg Tyr Gly His
 157 100 105 110

160 <210> SEQ ID NO: 7

161 <211> LENGTH: 111

162 <212> TYPE: PRT

163 <213> ORGANISM: Cynomolgus

W--> 164 il-13

166 <400> SEQUENCE: 7

167 Ser Pro Val Pro Pro Ser Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
 168 1 5 10 15
 169 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
 170 20 25 30
 171 Val Trp Ser Ile Asn Leu Thr Ala Gly Val Tyr Cys Ala Ala Leu Glu
 172 35 40 45

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Input Set : A:\seqlist.txt

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```

173 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
174      50      55      60
175 Met Leu Asn Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
176 65      70      75      80
177 Ser Leu Arg Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
178      85      90      95
179 Asp Leu Leu His Leu Lys Lys Leu Phe Arg Glu Gly Gln Phe Asn
180      100      105      110
183 <210> SEQ ID NO: 8
184 <211> LENGTH: 112
185 <212> TYPE: PRT
186 <213> ORGANISM: Rhesus IL-13
188 <400> SEQUENCE: 8
189 Ser Pro Val Pro Arg Ser Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
190 1      5      10      15
191 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
192      20      25      30
193 Val Trp Ser Ile Asn Leu Thr Ala Gly Val Tyr Cys Ala Ala Leu Glu
194      35      40      45
195 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
196      50      55      60
197 Met Leu Asn Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
198 65      70      75      80
199 Ser Leu Arg Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
200      85      90      95
201 Asp Leu Leu Val His Leu Lys Lys Leu Phe Arg Glu Gly Arg Phe Asn
202      100      105      110
205 <210> SEQ ID NO: 9
206 <211> LENGTH: 112
207 <212> TYPE: PRT
208 <213> ORGANISM: Marmoset IL-13
210 <400> SEQUENCE: 9
211 Gly Pro Val Pro Pro Tyr Thr Ala Leu Lys Glu Leu Ile Glu Glu Leu
212 1      5      10      15
213 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
214      20      25      30
215 Val Trp Ser Ile Asn Met Thr Ala Gly Val Tyr Cys Ala Ala Leu Glu
216      35      40      45
217 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
218      50      55      60
219 Met Leu Ser Gly Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
220 65      70      75      80
221 Ser Leu Leu Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Lys
222      85      90      95
223 Asp Leu Leu Arg His Leu Arg Lys Leu Phe His Gln Gly Thr Phe Asn
224      100      105      110
227 <210> SEQ ID NO: 10
228 <211> LENGTH: 112
229 <212> TYPE: PRT

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230 <213> ORGANISM: Artificial Sequence
232 <220> FEATURE:
233 <223> OTHER INFORMATION: Chimaeric Homo Sapien IL-13
235 <400> SEQUENCE: 10
236 Gly Pro Val Pro Pro Ser Ser Ala Leu Lys Glu Leu Ile Glu Glu Leu
237 1 5 10 15
238 Ala Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
239 20 25 30
240 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Asp
241 35 40 45
242 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Arg Thr Gln Arg
243 50 55 60
244 Ile Leu Ser Ala Phe Cys Pro His Lys Val Ser Ala Gly Gln Phe Ser
245 65 70 75 80
246 Ser Leu Arg Val Arg Asp Thr Lys Ile Glu Val Ala Gln Phe Val Thr
247 85 90 95
248 Asp Leu Leu Val His Leu Lys Arg Leu Phe Arg Gln Gly Thr Phe Asn
249 100 105 110
252 <210> SEQ ID NO: 11
253 <211> LENGTH: 121
254 <212> TYPE: PRT
255 <213> ORGANISM: Artificial Sequence
257 <220> FEATURE:
258 <223> OTHER INFORMATION: Chimaeric Homo Sapien IL-13
260 <400> SEQUENCE: 11
261 Gly Pro Val Pro Pro Ser Thr Ala Leu Arg Glu Leu Ile Glu Glu Leu
262 1 5 10 15
263 Val Asn Ile Thr Gln Asn Gln Lys Ala Pro Leu Cys Asn Gly Ser Met
264 20 25 30
265 Val Trp Ser Ile Asn Leu Thr Ala Gly Met Tyr Cys Ala Ala Leu Glu
266 35 40 45
267 Ser Leu Ile Asn Val Ser Gly Cys Ser Ala Ile Glu Lys Thr Gln Arg
268 50 55 60
269 Met Leu Gly Gly Phe Cys Pro His Lys Phe Asn Asn Phe Thr Val Ser
270 65 70 75 80
271 Phe Trp Leu Arg Val Pro Lys Val Ser Ala Ser His Leu Glu Asp Thr
272 85 90 95
273 Lys Ile Glu Val Ala Gln Phe Val Lys Asp Leu Leu Leu His Leu Lys
274 100 105 110
275 Lys Leu Phe Arg Glu Gly Arg Phe Asn
276 115 120
279 <210> SEQ ID NO: 12
280 <211> LENGTH: 133
281 <212> TYPE: PRT
282 <213> ORGANISM: Artificial Sequence
284 <220> FEATURE:
285 <223> OTHER INFORMATION: Chimaeric Homo Sapien IL-13
287 <400> SEQUENCE: 12
288 Phe Asn Asn Phe Thr Val Ser Phe Trp Leu Arg Val Pro Lys Val Ser

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VERIFICATION SUMMARY

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DATE: 03/09/2005

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Input Set : A:\seqlist.txt

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L:13 M:270 C: Current Application Number differs, Replaced Current Application Number

L:14 M:271 C: Current Filing Date differs, Replaced Current Filing Date

L:164 M:259 W: Allowed number of lines exceeded, <213> ORGANISM: